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(56) Documents cited

GB 2219377 A

GB 2213914 A

GB 2109535 A

FR 002612331 A

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(54) Safety flush control knob. e.g. for domestic appliances

(57) As a safety feature for a domestic appliance, a control knob has a grip portion 2 which can only be grasped when two surfaces 4, 5 are depressed. The knob of the invention also has a locking pin 9 which is associated with a locking disc 11. In its (illustrated) locked position, the surfaces 4, 5 cannot be depressed to permit turning of the knob because legs 8 extending from the surfaces abut the locking disc. In a release position at the other end of its groove, the locking disc 11 rotates so that grooves 11a in it register with the legs to permit the surfaces 4, 5 to be depressed and the knob to be operated.

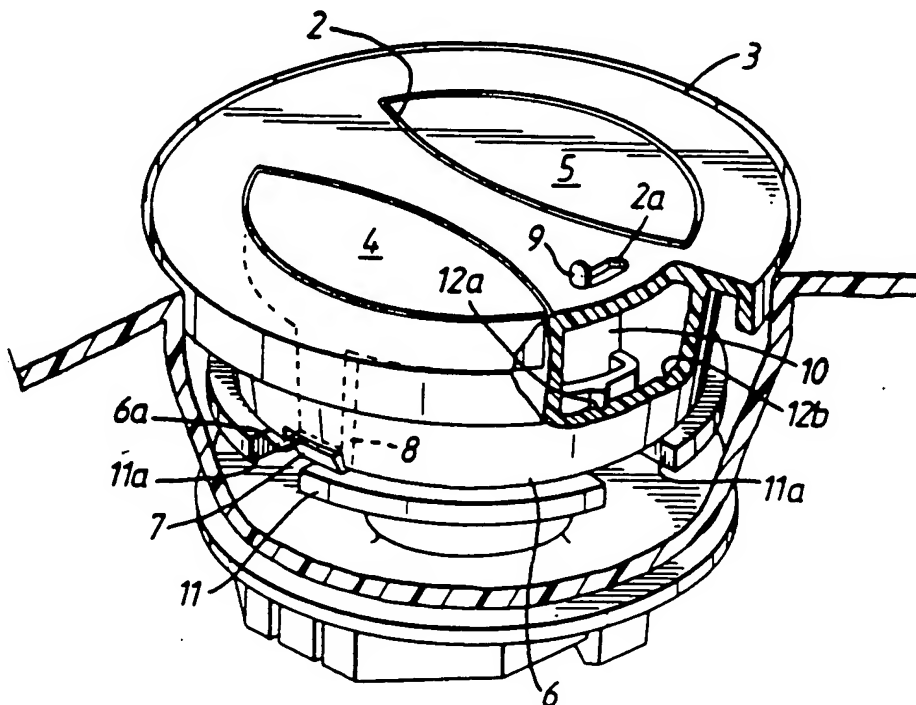


Fig. 2.

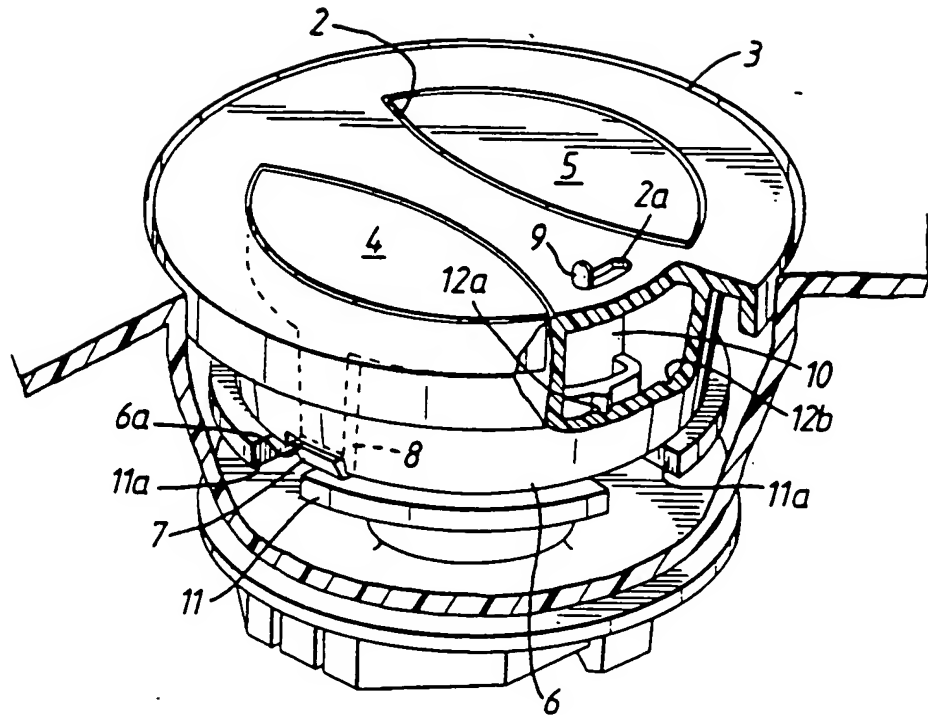


Fig. 2.

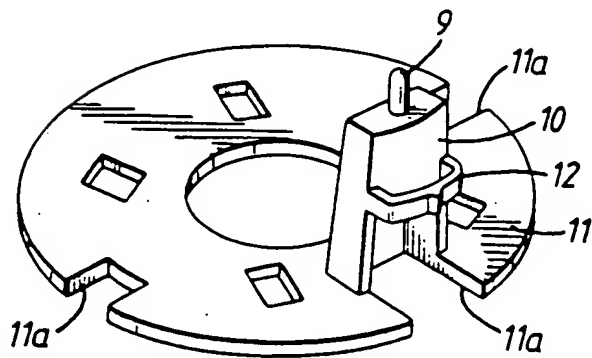


Fig. 4.

CONTROL KNOB

This invention relates to control knobs and especially to control knobs for domestic appliances such as washing machines, dishwashers or gas operated appliances. Such control knobs usually enable the shaft of control devices such as timers, valves etc to be manually rotated.

As a safety feature particularly with children in mind, so-called flush control knobs have been proposed in which a pair of surfaces normally lies flush with the surface of the grip portion of the control knob, it being necessary to depress these surfaces in order to grasp the grip portion (GB-A-2109535, 2213914 and 2219377).

However, while such flush control knobs do represent a safety improvement, they are far from child-proof.

The invention provides a control knob comprising a grip portion extending transversely to the axis of the control knob, a pair of surfaces flush with the surface of the grip portion which are displaceable in the direction of the axis of the control knob to enable the grip portion to be grasped, and a slideable locking member which in a

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the surfaces are depressed when the locking member is in its locking position but which has apertures which move into register with the legs when the locking member is moved to its release position. The tubular sleeve may guide the locking member in its movement between its locking and release positions. The locking member may be a pin running in a groove in the grip portion.

A control knob for a domestic appliance constructed in accordance with the invention will now be described, by way of example, with reference to the accompanying drawings, in which:

Figure 1 is a perspective view of a washing machine having such a control knob;

Figure 2 is a perspective view of the control knob, partially cut away, in its locked position;

Figure 3 is a perspective view of the control knob, partially exploded and partially cut away, in its released position; and

Figure 4 is a perspective view of the component which includes the slideable locking member.

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(not shown) which engage in slotted holes in the base of the sleeve. The pin moves in slot 2a in the grip portion 2.

The component also has an integral spring 12 which can engage in notches 12a or 12b in the interior of the tubular sleeve 6.

Thus, in the locking position of the locking pin shown in Figure 2, the spring 12 engages in notch 12a and the legs 8 which extend downwardly from the surfaces 4 and 5 cannot move further down because of the locking disc 11. Therefore, if the surfaces 4, 5 are depressed, they will not move to any substantial extent and it will not be possible to grasp the grip portion 2.

When the locking pin has been moved to its release position as shown in Figure 3, and the spring 12 has engaged notch 12b, apertures 11a etc in the locking disc 11 now register with the downwardly extending legs 8. Therefore, the surfaces 4, 5 may be freely depressed and the control disc 11 will no longer abut the downwardly extending legs 8, enabling the grip portion to be grasped.

This provides an added safety feature over and above that provided by a normal flush control knob.

CLAIMS

1. A control knob comprising a grip portion extending transversely to the axis of the control knob, a pair of surfaces flush with the surface of the grip portion which are displaceable in the direction of the axis of the control knob to enable the grip portion to be grasped, and a slideable locking member which in a locking position causes a part associated with the locking member to abut the part associated with at least one surface in the event of displacement of the pair of surfaces, to prevent such displacement, and which in a release position causes the part associated with the locking member to be moved to a position in which it does not abut the part associated with at least one surface in the event of displacement of the pair of surfaces, to permit displacement of the pair of surfaces.

2. A control knob as claimed in claim 1, in which the locking member is associated with a locking plate which extends radially with respect to the axis of the control knob in order to abut legs extending from the surfaces when the locking member is in its locking position, the locking plate having apertures which register with the legs when the

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to 6, in which the locking member extends from the grip portion.

8. A control knob substantially as hereinbefore described with reference to the accompanying drawings.

9. A domestic appliance having a control knob as claimed in claim 8.

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